EVIONYX-0024USA00
USSN 09/827,982

AFTER FINAL RESPONSE - RCE

PRESENT CLAIMS (Including Amendments Herein)

1. (Canceled)
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37. (Canceled)

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38. (New) A rechargeable electrochemical cell system comprising:

a plurality of rechargeable cells, each rechargeable cell including

a first electrode, a second electrode, and a third electrode electrically isolated from the second electrode;

wherein each cell is configured for being discharged upon application of a load across the first electrode and the second electrode, and

wherein each cell is configured for being independently recharged upon application of the voltage across the first electrode and the third electrode of each cell in isolation from the other cells.

39. (New) The rechargeable electrochemical cell system as in claim 38, wherein each second electrode is in isolation from the voltage across each corresponding first electrode and third electrode when the cell is recharged.

40. (New) The rechargeable electrochemical cell as in claims 38, wherein the isolation is effectuated by a transformer, a power supply, a capacitor, a switch, or a combination comprising at least one of the foregoing.

41. (New) The rechargeable electrochemical system as in claim 38, wherein the voltage for recharging is applied by one or more transformers.

42. (New) In the rechargeable electrochemical cell system as in claim 41, wherein the transformer comprises a single primary winding and a plurality of secondary windings, each secondary winding associated with a third electrode of a corresponding cell.

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43. (New) The rechargeable electrochemical cell system as in claim 42, further comprising a switching power converter coupled to a power source in operable connection with the primary winding.

44. (New) The rechargeable electrochemical cell system as in claim 11, wherein the switching power converter comprises a MOSFET device.

45. (New) The rechargeable electrochemical cell system as in claim 43, wherein the power source is controlled by a control unit.

46. (New) The rechargeable electrochemical cell system as in claim 45, wherein the control unit comprises an oscillator.

47. (New) The rechargeable electrochemical cell system as in claim 42, further comprising a diode between at least one pair of the secondary winding and the third electrode.

48. (New) The rechargeable electrochemical cell system as in claim 42, further comprising a rectifier between at least one pair of the secondary winding and the third electrode.

49. (New) The rechargeable electrochemical cell system as in claim 38, wherein the voltage across the first electrode and the third electrode is provided from a power supply.

50. (New) The rechargeable electrochemical cell system as in claim 49, further comprising a cell conditioning unit between the power supply, and the recharging circuit of each cell in the system.

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51. (New) The rechargeable electrochemical cell system as in claim 50, wherein the cell conditioning unit comprises a switching power converter.

52. (New) The rechargeable electrochemical cell system as in claim 50, wherein the cell conditioning unit comprises a switching power converter.

53. (New) The rechargeable electrochemical cell system as in claim 50, wherein the cell conditioning unit comprises a battery parameters monitor.

54. (New) The rechargeable electrochemical so system as in claim 50, wherein the cell conditioning unit comprises signal conditioning system.

54. (New) The rechargeable electrochemical cell system as in claim 50, wherein the cell conditioning unit comprises a rectifier.

55. (New) The rechargeable electrochemical cell system as in claim 50, wherein the cell conditioning unit comprises a filter.

56. (New) The rechargeable electrochemical cell system as in claim 38, wherein the voltage is applied across the recharging circuit with a capacitor.

57. (New) The rechargeable electrochemical cell system is in claim 56, wherein the capacitor is coupled to a power supply.

58. (New) The rechargeable electrochemical cell system is in claim 57, wherein the capacitor is charged by the power supply by operation of a switch device.

59. (New) The rechargeable electrochemical cell system as in claim 56, wherein the capacitor is connected across the recharging circuit via a switch between the capacitor and the first electrode and the switch between the capacitor and the third electrode.

60. (New) The rechargeable electrochemical cell system as in claim 57, wherein the capacitor is coupled to the first electrode via a first switch, and wherein the capacitor is coupled to the second electrode via a second switch, and wherein the power supply is coupled to the capacitor via a third switch.

61. (New) The rechargeable electrochemical cell system as in claim 60, wherein operation of the third switch, and operation of the first and second switches, are optimized based on charging the capacitor and charging the individual cells.

62. (New) The rechargeable electrochemical cell system as in claim 38, wherein the cell is recharging upon application of a selective voltage across one or more selected recharging circuits.

63. (New) The rechargeable electrochemical cell system as in claim 62, wherein selected recharging circuits are selected based on charging requirements.

64. (New) The rechargeable electrochemical cell system as in claim 38, wherein at least a portion of the plurality of cells are arranged in series.

65. (New) The rechargeable electrochemical cell system as in claim 38, wherein at least a portion of the plurality of cells are arranged in parallel.

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66. (New) A ~~method of recharging~~ a plurality ~~of electrochemical~~ cells comprising:

applying a discrete power source to each cell which is isolated from the power source associated with other cells.

67. (New) The ~~method~~ as in claim 66, wherein the isolation is effectuated by a transformer, a power supply, a capacitor, a switch, or a combination comprising at least one of the foregoing.

68. (New) The ~~method as in~~ claim 66, wherein the ~~voltage for~~ recharging is applied by one or more transformers.

69. (New) ~~The method as in claim~~ 66, wherein the ~~transformer~~ comprises a single primary winding and a plurality of secondary windings, each secondary winding associated with a charging electrode ~~of a corresponding~~ cell.